IN THE CLAIMS

Please amend the claims as follows:

Claims 1-21 (Canceled).

Claim 22 (New): An ionomer obtained by reacting metal compound particles having an average particle diameter of 1 μm or less, with an olefin-based random copolymer obtained by copolymerizing ethylene, an α-olefin having 3 to 10 carbon atoms, a functional group-containing unsaturated monomer and, as necessary, a non-conjugated diene.

Claim 23 (New): An ionomer according to Claim 22, wherein a proportion of the metal compound particles is 0.01 to 10 parts by mass relative to 100 parts by mass of the olefin-based random copolymer.

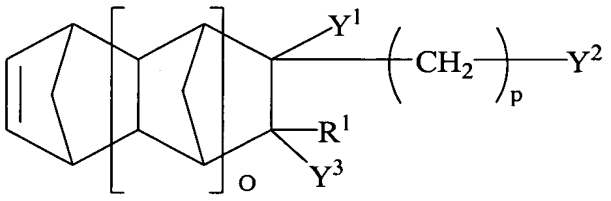
Claim 24 (New): An ionomer according to Claim 22, wherein a metal component in the metal compound particles is at least one kind of metal selected from the group consisting of sodium, magnesium, calcium, zirconium, zinc and aluminum.

Claim 25 (New): An ionomer according to Claim 22, wherein the metal compound particles are made of zinc oxide.

Claim 26 (New): An ionomer according to Claim 22, wherein a functional group in the functional group-containing unsaturated monomer is carboxyl group, hydroxyl group, epoxy group or sulfonic acid group.

Claim 27 (New): An ionomer according to Claim 22, wherein the functional group-containing unsaturated monomer is a functional cyclic compound represented by the following general formula (1):

[Formula 1]



. . . (1)

[in the general formula (1), R^1 is a hydrogen atom or a hydrocarbon group having 1 to 10 carbon atoms; Y^1, Y^2 and Y^3 are each independently a hydrogen atom, a hydrocarbon group having 1 to 10 carbon atoms or –COOH with a proviso that at least one of Y^1, Y^2 and Y^3 is –COOH and, when two or more of Y^1, Y^2 and Y^3 are –COOH, they may combine to each other to form an acid anhydride [-CO-(O)-CO-]; o is an integer of 0 to 2; and p is an integer of 0 to 5].

Claim 28 (New): An ionomer according to Claim 22, wherein the olefin-based random copolymer is a copolymer obtained by copolymerizing 35 to 94.99 mol % of ethylene, 5 to 50 mol % of an α-olefin having 3 to 10 carbon atoms, 0.01 to 5 mol % of a functional cyclic compound represented by the general formula (1) and 0 to 10 mol % of a non-conjugated diene.

Claim 29 (New): A process for producing an ionomer, which comprises a step of subjecting an olefin-based random copolymer obtained by copolymerizing ethylene, an α-olefin having 3 to 10 carbon atoms, a functional group-containing unsaturated monomer and, as necessary, a non-conjugated diene, to a heat treatment or a dynamic heat treatment in

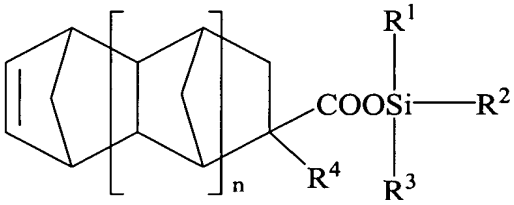
the presence of metal compound particles having an average particle diameter of 1 μm or less.

Claim 30 (New): A molded article obtained by molding a molding material containing an ionomer set forth in Claim 22, by a molding method selected from injection molding, extrusion molding, vacuum molding, powder slush molding, calender molding, transfer molding, solvent casting and press molding.

Claim 31 (New): A process for producing an ionomer, which comprises

subjecting, to a dynamic heat treatment, a metal compound and an olefin-based random copolymer obtained by copolymerizing ethylene, an α-olefin having 3 to 10 carbon atoms and a functional cyclic compound represented by the following general formula (2):

[Formula 2]



. . . (2)

[in the general formula (2), n is 0 or 1; and R^1, R^2, R^3 and R^4 are each independently a hydrogen atom, a halogen atom or a mono-valent organic group].

Claim 32 (New): A process for producing an ionomer according to Claim 31, wherein, in the above mentioned general formula (2), R^1, R^2, R^3 and R^4 are each independently a hydrogen atom or a hydrocarbon group having 1 to 20 carbon atoms.

Claim 33 (New): A process for producing an ionomer according to Claim 31, wherein, in the above mentioned general formula (2), all of R^1, R^2 and R^3 are an ethyl group, or one of R^1, R^2 and R^3 is a tert-butyl group and the remaining two are each a methyl group.

Claim 34 (New): A process for producing an ionomer according to Claim 31, wherein, in the above mentioned general formula (2), R^4 is a methyl group.

Claim 35 (New): A process for producing an ionomer according to Claim 31, wherein the olefin-based random copolymer is obtained by copolymerizing 35 to 94.99 mol % of the ethylene, 5 to 50 mol % of the α-olefin having 3 to 10 carbon atoms and 0.01 to 5 mol % of the functional cyclic compound represented by the above mentioned general formula (2), and 100 parts by mass of the olefin-based random copolymer and 0.1 to 20 parts by mass of the metal compound are subjected to a dynamic heat treatment at 120 to 350°C at a shear rate of 10 to 2,000/sec.

Claim 36 (New): A process for producing an ionomer according to Claim 31, wherein the olefin-based random copolymer is obtained by copolymerizing the ethylene, the α-olefin having 3 to 10 carbon atoms, the functional cyclic compound represented by the above mentioned general formula (2) and a non-conjugated diene.

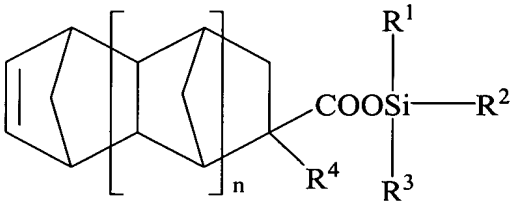
Claim 37 (New): A process for producing an ionomer according to Claim 36, wherein the olefin-based random copolymer is obtained by copolymerizing the ethylene, the α-olefin, the functional cyclic compound represented by the above mentioned general formula (2) and 10 mol % or less of the non-conjugated diene.

Claim 38 (New): A process for producing an ionomer according to Claim 31, wherein the metal compound is a metal oxide or a metal hydroxide.

Claim 39 (New): An ionomer obtained a process for producing an ionomer set forth in Claim 31.

Claim 40 (New): A process for producing an ionomer composition, which comprises subjecting 100 parts by mass of an olefin-based random copolymer obtained by copolymerizing 35 to 94.99 mol % of ethylene, 5 to 50 mol % of an α-olefin having 3 to 10 carbon atoms, 0.01 to 5 mol % of a functional cyclic compound represented by the following general formula (2) and 0 to 10 mol % of a non-conjugated diene, 0.1 to 20 parts by mass of a metal compound, and 300 parts by mass or less of a polymer compound selected from a thermoplastic resin and a rubber and/or 100 parts by mass or less of a softening agent, to a dynamic heat treatment at 120 to 350°C at a shear rate of 10 to 2,000/sec:

[Formula 3]



. . . (2)

[in the general formula (2), n is 0 or 1; and R^1, R^2, R^3 and R^4 are each independently a hydrogen atom, a halogen atom or a mono-valent organic group].

Claim 41 (New): An ionomer composition obtained by a process for producing an ionomer composition set forth in Claim 40.